

This Page Is Inserted by IFW Operations  
and is not a part of the Official Record

## **BEST AVAILABLE IMAGES**

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images may include (but are not limited to):

- BLACK BORDERS
- TEXT CUT OFF AT TOP, BOTTOM OR SIDES
- FADED TEXT
- ILLEGIBLE TEXT
- SKEWED/SLANTED IMAGES
- COLORED PHOTOS
- BLACK OR VERY BLACK AND WHITE DARK PHOTOS
- GRAY SCALE DOCUMENTS

**IMAGES ARE BEST AVAILABLE COPY.**

**As rescanning documents *will not* correct images,  
please do not report the images to the  
Image Problem Mailbox.**

Sub B1  
1. (Amended) A method of producing a laminated packaging material comprising a core layer of paper or paperboard and a barrier layer applied on one side of the core layer, wherein a liquid barrier composition including a dispersion or solution of a polymer and an inorganic laminar compound is applied as a barrier layer on at least one side of a carrier layer and is dried during heating for driving off the dispersant or solvent, whereafter the carrier layer with the applied, dried barrier layer is combined and permanently united with one side of the core layer.

2. (Amended) A method as claimed in Claim 1, wherein said inorganic laminar compound is dispersed to an exfoliated and delaminated state in the liquid barrier composition and in the dried barrier layer.

3. (Amended) A method as claimed in Claim 1, wherein said barrier layer is applied by means of liquid film coating with a liquid barrier polymer composition further including an inorganic laminar compound.

4. (Amended) A method as claimed in Claim 1, wherein the barrier layer includes from about 1 to about 30 weight % of the inorganic laminar compound, based on dry coating weight.

10070363.030502

Sub B1  
exit 12

5. (Amended) A method as claimed in Claim 1, wherein the barrier layer includes from about 70 to about 99. weight % of polymer, based on dry coating weight.

6. (Amended) A method as claimed in Claim 1, wherein the amount of the liquid gas barrier composition coated onto the carrier layer is from about 1 to about 10 g/m<sup>2</sup> based on dry coating weight.

7. (Amended) A method as claimed in Claim 1, wherein the liquid gas barrier composition applied as barrier layer includes a polymer with functional hydroxyl groups.

8. (Amended) A method as claimed in Claim 7, wherein said polymer with functional hydroxyl groups is selected from among polyvinyl alcohol, ethylene vinyl alcohol, starch, starch derivatives, carboxyl methyl cellulose and other cellulose derivatives, or a mixture of two or more thereof.

9. (Amended) A method as claimed in Claim 1, wherein said liquid gas barrier composition applied as barrier layer is dried and optionally cured at a temperature of approx. 80-230°C.

10070363.030502  
2050E0"E9E0/001

*Sub B*  
*cont*

10. (Amended) A method as claimed in Claim 1, wherein said liquid gas barrier composition applied as barrier layer also includes a polymer with functional carboxylic acid groups.

11. (Amended) A method as claimed in Claim 10, wherein said polymer with functional carboxylic acid groups is selected from among ethylene acrylic acid copolymer and ethylene methacrylic acid copolymer or mixtures thereof.

12. (Amended) A method as claimed in Claim 11, wherein said barrier layer substantially consists of a mixture of polyvinyl alcohol, ethylene acrylic acid copolymer and the inorganic laminar compound.

13. (Amended) A method as claimed in Claim 2, wherein the barrier layer substantially consists of a mixture of starch or starch derivative and the inorganic laminar compound.

14. (Amended) A method as claimed in Claim 1, wherein the dried barrier layer is cured at a web surface temperature of up to 190°C.

10070363.030500  
205050 E9E0/001

*Sub B1 out 12*

15. (Amended) A method as claimed in Claim 1, wherein the liquid barrier composition is applied as a barrier layer is dried at a web surface temperature of 140 to 160°C and is cured at a web surface temperature of from 170 to 190°C.

16. (Amended) A method as claimed in Claim 1, wherein said carrier layer consists of paper.

17. (Amended) A method as claimed in Claim 1, wherein said carrier layer consists of paper with a grammage of approx. 5-35 g/m<sup>2</sup>.

18. (Amended) A method as claimed in Claim 1, wherein said carrier layer consists of plastic coated paper.

19. (Amended) A method as claimed in Claim 1, wherein the carrier layer bearing at least one barrier layer is combined and united with the core layer by extrusion of a layer of thermoplastics therebetween.

20. (Amended) A method as claimed in Claim 1, wherein the carrier layer bears a said barrier layer on one side thereof and is combined with the core layer by extrusion of a layer of thermoplastics between the carrier layer and the core layer.

10070363.030502

*Sub B  
cont*

21. (Amended) A method as claimed in Claim 20, wherein an outer layer of thermoplastics is applied on the barrier layer by means of extrusion.

22. (Amended) A method as claimed in Claim 20, wherein the carrier layer bears a said barrier layer on one or both sides and is combined with the core layer by extrusion of a layer of thermoplastics between the core layer and a said barrier layer.

*2050E03E3E200F*

23. (Amended) A method as claimed in Claim 22, wherein the carrier layer bears a said barrier layer on both sides thereof and a layer of thermoplastics is applied to the outer layer of barrier material by extrusion.

24. (Amended) A method as claimed in Claim 1, wherein the layer of plastics applied between the core layer and the carrier layer or a said barrier layer includes a substance functioning as light barrier.

25. (Amended) A laminated packaging material, wherein it is produced by the method as claimed in Claim 1.

26. (Amended) A packaging container, wherein it is produced by fold formation of a sheet or web-shaped laminated packaging material as claimed in Claim 25.